

**MCKIN SUPERFUND SITE
OFFSITE OPERABLE UNIT
MARCH 2001 ROD AMENDMENT**

TABLES

Table 1
Comparison of 1985 ROD remedy and 2000 Modified Remedy

<u>Original Remedy</u>	<u>Modified Remedy</u>
On-site aeration of soils in site areas of identified hazardous substance contamination to achieve soil quality levels protective of public health and the environment (completed in 1987)	On-site aeration of soils in site areas of identified hazardous substance contamination to achieve soil quality levels protective of public health and the environment (completed in 1987)
Off-site disposal of drums and their contents found on the Site (completed in 1986)	Off-site disposal of drums and their contents found on the Site (completed in 1986)
Perform soil test in petroleum contaminated areas to further characterize the nature of petroleum contamination (completed in 1986; on-site treatment of 2500 cubic yards of petroleum-contaminated waste completed in 1987)	Perform soil test in petroleum contaminated areas to further characterize the nature of petroleum contamination (completed in 1986; on-site treatment of 2500 cubic yards of petroleum-contaminated waste completed in 1987)
Prevent the subsurface discharge of contaminated groundwater from the site to off-site aquifers	Require overlapping institutional controls to prevent exposure to contaminated groundwater
Restore, within a reasonable time and practical limits, the off-site groundwater in the overburden soils and shallow bedrock that had been contaminated by groundwater moving out from the McKin facility	Monitor the groundwater and surface water quality to ensure that VOC concentrations continue to decrease and that the groundwater plume does not expand
Protect state-designated Royal River surface water uses and aquatic life in the River	Protect State-designated Royal River surface water uses and aquatic life in the River through a contingency plan between the Settling Parties and Maine DEP
Operation and maintenance of the site, and final closure of the site including GETS decommissioning and removal of all equipment	Operation and maintenance of the site, and final closure of the site including GETS decommissioning and removal of all equipment
	Covering of Boiling Springs to prevent contact with contaminated spring water by people or wildlife (completed in 2000)

Table 2
TCE Concentrations in Eastern Plume Sampling Locations
McKin Superfund Site, Gray Maine

Sampling Location*	First Detection- in parts per billion	Nov 1989	Oct 1991	Oct 1995	Nov 1999
MW-401A	(9/89) 910	NS	170	6	16
MW-401B	(9/89) 380	NS	58	2.8	4.7
MW-401C	(9/89) 6100	NS	530	63	13
MW-403B	(8/90) 5 T	NS	3 J	0.5 J	ND
MW-403C	(10/89) 34	NS	100	4.4	ND
MW-212C	(9/89) 120	110	49	2.7	ND
MW-206A	(9/89) 3100	4500 E	5000	3800	2200 S
MW-206B	(9/89) 2900	2900	110	36	82 S
B-3A	(3/84) 120	4800	6400	1300	73
B-3B	(3/84) 1800	1600 E	1300	50	25
B-4A	(7/89) 44	44	60	100	47 S
MW-801A	(2/92) 5	---	---	3.3	3.8
MW-801B	(6/91) 420	---	540	340	110 S
MW-801C	(6/91) 460	---	490/450	340	120 S
MW-802B	(1/92) 3 J	---	ND	10	27 S
MW-803A	(7/91) 240	---	490/600	280	160 S
MW-803B	(6/91) 550	---	730	380	180 S
MW-803C	(6/91) 1500/1300	---	3500	1700	680/590 S
B-102	(10/82) 120	1500	2300	1500	700
SW-5 (Boiling Springs)	(4/84) 44	670 E	NS	460/470	120 S
SW-1	(9/89) 13	---	8	7.7	3.1

* The sampling locations are listed in increasing distance from the McKin facility. The designations of "A" indicates a shallow bedrock well, "B" a deep overburden well, and "C" a shallow overburden well

NS - Not Sampled, ND- Not Detected

J - estimated quantity; E - concentration exceeds calibration range, T - reported as a trace, S- concentration determined in analysis at secondary dilution, 1500/1300 - two samples collected from this location on that date

Table 3a
Summary of Groundwater Concentration Extrapolations
Tetra Tech NUS, November 1997

Eastern Plume				
Well or Spring	# of samples	First Sampling Date Used	Estimated Half-life (Years)	Estimated Year to Reach TCE Clean-up (5ug/L)
MW-401A	15	03/94	55.63	2020
MW-401B	16	03/94	-9.66	--
MW-401C	30	01/92	1.08	1999
MW-403C	26	07/91	0.75	--
MW-212C	29	07/91	1.03	--
MW-206A	19	4/93	3.65	2030
MW-206B	24	2/93	2.16	2002
B-3A	19	8/93	0.75	2001
B-3B	28	1/91	1.05	1999
MW-801B	18	10/93	3.42	2016
MW-801C	14	11/94	2.32	2010
MW-802B	6	11/93	7.56	2006
MW-803A	12	01/95	3.79	2018
MW-803B	17	01/94	3.05	2015
MW-803C	23	10/92	3.61	2026
B-102	21	2/93	5.81	2041
SW-5	11	10/93	2.76	2014
SW-1	54	09/89	19.68	2000
Minimum	6	09/89	-9.66	1999
Maximum	54	01/95	55.63	2041
Average				2013

Table 3a
Summary of Groundwater Concentration Extrapolations
Tetra Tech NUS, November 1997

Northern Plume				
Well or Spring	# of samples	First Sampling Date Used	Estimated Half-life (Years)	Estimated Year to Reach TCE Clean-up (5ug/L)
MW-402A	24	10/91	2.42	--
MW-402B	22	03/93	-8.99	--
MW-401A	15	03/94	55.63	2021
MW-401B	16	03/94	-9.66	--
MW-401C	30	01/92	1.08	1999
B-1A	43	3/84	2.57	2015
B-1B	43	3/84	2.74	2016
B-2A	36	1/89	8.40	2018
B-2B	41	3/84	8.69	2023
B-2C	25	4/92	9.30	2008
B-5A	38	7/87	3.04	2008
B-5B	37	7/87	3.33	2012
MW-202A	27	1/91	7.40	2007
Mitchell	12	11/94	1.35	--
MW-203A	6	7/92	3.03	--
MW-203B	5	10/92	2.26	--
Minimum	5	03/84	-9.66	1999
Maximum	43	11/94	55.63	2023
Average	23.9	08/91		2013

Notes: The sampling locations are listed in increasing distance from the McKin facility. The designations of "A" indicates a shallow bedrock well, "B" a deep overburden well, and "C" a shallow overburden well.
Monitoring well cluster MW-401 was included in both plumes

Table 3B
Estimated Time to Reach Groundwater TCE Concentrations
SME, March 1999

Eastern Plume				
Well or Spring	1998 TCE Concentration Range (ug/L)	Approximate Year of Peak TCE Concentration	Estimated Half-life (years)	Estimated Year to Reach TCE Cleanup 5 ug/L
MW-401A	12 - 36	<1989	1.8	2003 - 2009
MW-401B	24 - 92	<1989	1.5	2000 - 2019
MW-401C	69 - 94	<1989	1.5	2005 - 2026
MW-403A	<0.5	<1989	-	--
MW-403B	<0.5	<1992?	-	--
MW-403C	<0.5	<1992?	1.2	--
MW-206A	2,700 - 3,100	1991?	4.2	2036
MW-206B	31 - 120	1993	1.6	2004 - 2040
B-3A	130 - 260	1990 - 1993?	1.0	2003
B-3B	18 - 29	<1984	1.1	2003
MW-212A	<0.5	1991 - 1992	-	--
MW-212B	<0.5	1992	-	--
MW-212C	<0.5	<1989	1.2	--
B-4A	42 - 87	1993 - 1997?	-	
MW-803A	230 - 280	1994	4.4	2023
MW-803B	250 - 290	1993 - 1994	3.7	2019
MW-803C	960 - 1,200	1993 - 1994	3.5	2026
MW-801A	4.8 - 5	1997	-	--
MW-801B	170 - 350	1992	3.9	2019
MW-801C	170 - 200	1993	4	2019
MW-802A	<0.5	-	-	--
MW-802B	23	>1998	-	
B-102	710 - 1,100	1991	5.4	2038
Boiling Springs	210 - 230	1994	2.7	2013
	maximum 3,100 (MW-206A)		Range 1.0 - 5.4	Maximum 2040

Table 3B
Estimated Time to Reach Groundwater TCE Concentrations
SME, March 1999

Northern Plume				
Well or Spring	1998 TCE Concentration Range (ug/L)	Approximate Year of Peak TCE Concentration	Estimated Half-life (years)	Estimated Year to Reach TCE Cleanup 5 ug/L
MW-402A	0.95 - 2.8	<1989	2.0	-
MW-402B	32 -110	<1989	-	2022
B-1A	160 -340	<1984	2.4	2013
B-1B	130 - 190	<1984	2.4	2013
B-2A	9.8 - 12	1984 -1987	2.0	2011 -2025
B-2B	8.5 -11	<1984	5.1	2009 - 2015
B-2C	0.98 -2.1	1985?	2.8	-
B-5A	28 -63	1987	3.1	2008
B-5B	59 -79	1987	3.2	2011
MW-202A	12 - 14	1991 - 1992	6.9	2006
Mitchell Spring	1 - 2	1983- 1989	3.7	--
MW-203A	3	1992	3.4	--
MW-203B	4	1992	3.6	--
	maximum 3,40 (B-1A)		Range 2.0 - 6.9	Maximum 2025

Notes: Wells listed from upgradient to downgradient.

Assumes log-linear decay for post-peak TCE concentrations.

Assumed half-life of 5.6 and 3.6 years based on largest estimated half-life for wells along the approximate centerline of the eastern and northern plumes, respectively.

Table 4

MCKIN SITE HISTORICAL LOADING RATES OF TCE IN THE ROYAL RIVER
SEPTEMBER 1989 to NOVEMBER 2000

Date	Royal River Flow Rate at Yarmouth	Est. Royal River Flow Rate at SW-1 Based on Latest USGS Gage or S-D Relationship at Site (0-250 cfs)	TCE Concentration at SW-1	Qualifier	Loading Rate	Log 10 Loading Rate	Yearly Loading Rate Standard Deviation	Average Yearly Loading Rate
	(cfs)	(cfs)	(µg/l)		(Kg/Day)		(Kg/Day)	(Kg/Day)
Average		115	10		1.31	0.07	0.4	1.38
Standard Deviation		128	9		0.70	0.20	0.3	0.61
Max		615	37.0		4.1	0.6	1.1	2.67
Min		16	0.8		0.5	-0.3	0.1	0.59
09/20/89	51	27	13.0		0.86	-0.07	0.3	1.10
10/31/89	70	37	15.0		1.34	0.13		
05/15/90	720	336	#N/A	<5				1.72
08/13/90	289	141	5.0	5T	1.72	0.24		
10/25/90	1360	615	#N/A	<5				
01/25/91	102	52	16.0		2.05	0.31	0.3	1.91
04/16/91	380	183	5.0	5T	2.24	0.35		
07/17/91	37	20	37.0		1.80	0.26		
10/25/91	158	79	8.0		1.55	0.19		
01/30/92	109	56	30.0		4.09	0.61	1.1	2.67
04/21/92	621	292	4.0	4J	2.86	0.46		
07/15/92	82	43	20.0		2.08	0.32		
10/09/92	36	19	35.0		1.66	0.22		
02/04/93	70	37	26.0		2.33	0.37	0.8	2.16
04/07/93	963	443	3.0	3J	3.25	0.51		
08/18/93	30	16	37.0		1.48	0.17		
10/27/93	49	26	25.0		1.59	0.20		
01/20/94	94	48	10.0		1.18	0.07	0.3	1.29
04/13/94	572	270	#N/A	<5				
08/03/94	38	20	21.0		1.05	0.02		
11/04/94	143	72	9.2		1.62	0.21		
01/18/95	1090	499	0.8		0.99	-0.01	0.4	1.30
04/19/95	206	102	6.0		1.50	0.18		
07/26/95	61	32	22.0		1.73	0.24		
10/26/95	100	51	7.7		0.97	-0.01		
02/14/96	135	68	7.0		1.17	0.07	0.2	1.02
05/06/96	463	221	2.1		1.13	0.05		
08/20/96	49	26	11.0		0.70	-0.15		
10/11/96	116	59	7.3		1.06	0.02		
11/01/96	287	140	3.0		1.03	0.01		
12/13/96	410	213	2.0		1.04	0.02		
01/06/97	370	157	2.1		0.81	-0.09	0.3	1.05
01/09/97	223	138	3.1		1.05	0.02		
02/07/97	158	66	7.8		1.25	0.10		
02/19/97	144	54	8.7		1.15	0.06		
02/26/97	227	76	4.3		0.80	-0.10		
04/11/97	455	344	2.1		1.77	0.25		
05/06/97	404	208	2.7		1.37	0.14		
07/08/97	51	22	13		0.70	-0.15		
07/29/97	37	18	16		0.70	-0.15		
11/07/97	187	61	5.7		0.85	-0.07		
02/02/98	107	54	7.1		0.94	-0.03	0.1	0.90
04/16/98	159	78	4.2		0.81	-0.09		
07/15/98	106	68	5.4		0.90	-0.04		
10/02/98	41	30	14	Measured same flow by VA Method 9/15/98	1.01	0.00		
11/10/98	88	54	6.2		0.82	-0.09		
02/01/99	187	127	4.7		1.46	0.16	0.3	0.91
04/20/99	138	76	4.9		0.91	-0.04		
07/09/99	46	23	13.0		0.72	-0.14		
11/09/99	161	82	3.1	3.0 Dup	0.62	-0.21		
12/20/99	115	69	4.9		0.83	-0.08		
02/23/00	103	51	4.6	4.5 Dup	0.57	-0.25	0.1	0.59
05/17/00	217	114	2.3		0.64	-0.19		
07/13/00	63	38	7.1	6.3 Dup	0.66	-0.18		
11/22/00	104	52	4.0	3.8 Dup	0.51	-0.29		
<5	Below detection limit of 5 µg/l							
T	Trace level detected at or below the detection limit							
J	Approximate value estimated below the detection limit							
27	Flow rate determined from relationship with historical record (Water Years 1997-1998) at USGS Yarmouth Station							
110	Estimated flow rate determined from relationship with historical record (Water Years 1997-1998) at USGS Yarmouth Station							
	USGS provisional real-time data download, data not considered official							
85	Flow rate determined from SME stage discharge curve (rev. 12/99) and water elevation from Boiling Springs Station pressure transducer.							
23	Flow rate determined by SME through velocity area measurement.							

Loading Rate (kg/day) = Q * TCE Concentration * 7.48 * 60 * 60 * 24 * (0.000000001) * 3.7854
Loading rate (gallons/year) = Q * TCE Concentration * 7.48 * 60 * 60 * 24 * 365 * (0.000000001) * 3.7854 * (0.01) * (0.7072) * 264.172

Table 5
TCE Concentrations in Northern Plume Sampling Locations
McKin Superfund Site, Gray Maine

Sampling Location*	First Detection- in parts per billion	Nov 1989	Oct 1991	Oct 1995	Nov 1999
MW-402A	(9/89) 28	NS	23	15	1.2
MW-402B	(9/89) 540	NS	40	49	22
MW-401A	(9/89) 910	NS	170	6	16
MW-401B	(9/89) 380	NS	58	2.8	4.7
MW-401C	(9/89) 6100	NS	530	63	13
B-1A	(3/84) 29,000	3300	3000/2200	1100	300/270
B-1B	(3/84) 16,000	2800	4000	740	120 S
B-2A	(3/84) 56	74	27	37	7.9
B-2B	(3/84) 160	110	28	46	5.8
B-2C	(3/84) 91	38	83	26	3.1
B-5A	(3/84) 190	440 E	170	91	32 S
B-5B	(7/85) 1760 J/640	880/780E	410	120	44 S
MW-202A	(9/89) 9	14	20	15	9.5 S
Mitchell Spring	(10/82) 12	32	14	6.5	2.5
MW-203A	(9/89) 11	5	4 J	3.9	2.8
MW-203B	(9/89) 7	4 J	6	4.2	3

* The sampling locations are listed in increasing distance from the McKin facility. The designations of "A" indicates a shallow bedrock well, "B" a deep overburden well, and "C" a shallow overburden well

NS - Not Sampled

J - estimated quantity; E - concentration exceeds calibration range, S - concentration determined in analysis at secondary dilution

3000/2200 - two samples collected from this location on that date

McKin ROD Amendment
Table 6: Chemical-Specific ARARs
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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
Groundwater, Surface Water	FEDERAL - SDWA- Maximum Contaminant Levels (MCLs) (40 CFR 141.11-141.16)	MCLs have been promulgated for a number of common organic and inorganic contaminants to regulate the concentration of contaminants in public drinking water supply systems. MCLs may be relevant and appropriate for the RRDZ because the Royal River is a potential future drinking water supply.	MCLs may be used in determining action levels for surface water and treatment levels for extracted groundwater that is disposed of through direct discharge or groundwater reinjection.
Groundwater, Surface Water	FEDERAL - SDWA -Maximum Contaminant Level Goals (MCLGs) (40 CFR 141.50-141.51)	MCLGs are health goals for public water systems. MCLGs are set at levels that will result in no known or anticipated adverse health effects with an adequate margin of safety. Non-zero MCLGs are to be used when MCLs have not been established.	MCLs may be used in determining action levels for surface water and treatment levels for extracted groundwater that is disposed of through direct discharge or groundwater reinjection.
Groundwater, Surface Water	FEDERAL-EPA Risk Reference Doses (RfDs)	RfDs are dose levels developed based on noncarcinogenic effects and are used to develop Hazard Indices. A Hazard Index of less than or equal to 1 is considered acceptable.	EPA RfDs will be used to characterize risks due to exposure to contaminants in surface water.
Groundwater, Surface Water	FEDERAL - EPA Carcinogen Assessment Group Potency Factors	Potency Factors are developed by the EPA from Health Effects Assessments or evaluation by the Carcinogenic Assessment Group and are used to develop excess cancer risks. A range of 10^{-4} to 10^{-6} is considered acceptable.	EPA Carcinogenic Potency Factors will be used to compute the individual incremental cancer risk resulting from exposure to site contamination in surface water.
Groundwater, Surface Water	STATE - Maine Safe Drinking Water Act (22 MSRA §§ 2611, 2612, and Maine Department of Human Services Rule 10-144 A CMR c. 231-233)	Maine primary drinking water standards are equivalent to federal MCLs.	MCLs may be used in determining action levels for surface water and treatment levels for extracted groundwater that is disposed of through direct discharge or groundwater reinjection.
Surface Water	STATE -Maine Water Classification Program (38 MSRA §§ 464-470)	This program sets forth standards for the classification of Maine's waters. The Royal River is classified as a Class B river/stream. Discharges to these waters cannot lower water quality below the designated classification.	Maine standards for Class B water prohibit the discharge of TCE in excess of 2.7 ppb, based on human health for consumption of water and organisms.
Groundwater, Surface Water	STATE -Maine Hazardous Waste management Rules, 06-096 CMR c. 854	This rule establishes the standards applicable to the establishment, construction, and operation of waste facilities for hazardous waste in Maine.	Must meet performance standards at waste management boundary.
Groundwater, Surface Water	STATE - Rules Relating to Testing of Private Water Systems for Potentially Hazardous Contaminants (Maine Department of Human Services Rule 10-144A CMR c. 233, Appendix C)	Establishes the mechanism/procedures for testing of private residential water supplies. This program assists applicants in determining the possible existence of potentially hazardous contaminants in the water supply. Appendix C provides Maximum Exposure Guidelines (MEGs) and Action Levels for inorganic chemicals, pesticides, and organics.	MEGs may be considered in determining action levels for surface water and treatment levels for extracted groundwater that is disposed of through direct discharge or groundwater reinjection.

McKin ROD Amendment
Table 6: Chemical-Specific ARARs
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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
Groundwater, Surface Water	STATE - Maine Department of Human Services, Maximum Exposure Guidelines for Drinking Water (MEGs) (Memorandum, 10/23/92)	MEGs are non-promulgated risk-based guidelines developed as recommended maximum levels of contaminants in drinking water [carcinogenic risk of 1 E-05, and no lifetime adverse effects]. MEGs have been referenced in amendments to the Maine Hazardous Waste Management Rules, Solid Waste Management Act, and the Underground Storage Tank Regulations as performance standards for groundwater remediation.	MEGs may be considered in determining action levels for surface water and treatment levels for extracted groundwater that is disposed of through direct discharge or groundwater reinjection.

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Table 7: Location-Specific ARARs
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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
Floodplain	FEDERAL-Floodplain Executive Order (EO 11988) (Statement of Procedures on Floodplain Management and Wetlands Protection, 40 CFR Part 6, Appendix A)	Federal agencies are required to reduce the risk of flood loss, to minimize the impact of floods, and to restore and preserve the natural and beneficial value of floodplains.	Response action will be implemented in a manner that will have no adverse impacts on the floodplain.
Sediments, Wetlands	FEDERAL-CWA-Section 404(b)(i) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230)	Section 404 of the CWA regulates the discharge of dredged or fill material into U.S. waters. The purpose of Section 404 is to ensure that proposed discharges are evaluated with respect to the impact on the aquatic ecosystem. The guidelines maintain that no dredged or fill material discharge will be permitted if there is a practicable alternative with less impact to the aquatic system. Discharge also will not be permitted unless steps are taken to minimize adverse impacts, or if it will cause significant degradation of U.S. waters.	Any wetlands adversely affected by the remedial action will be restored or replaced.
Wetlands	FEDERAL-Wetlands Executive Order (EO 11990) (Statement of Procedures on Floodplain Management and Wetlands Protection, 40 CFR Part 6, Appendix A)	Under this order, federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and preserve and enhance the natural and beneficial use of wetlands. This order is relevant and appropriate to Superfund remedial actions performed by private parties.	Any wetlands adversely affected by the remedial action will be restored or replaced.
Floodplain	FEDERAL - RCRA Floodplain Restrictions for Hazardous Waste Facilities (40 CFR 264.18(b))	A hazardous waste facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout or to result in no adverse effects on human health or the environment if washout were to occur.	Alternatives are not expected to locate a hazardous waste facility construction within floodplain areas on site.
Wetlands, River	FEDERAL - 16 USC 661 et. seq., Fish and Wildlife Coordination Act	Requires federal agencies to take into consideration the effect that water-related projects will have on fish and wildlife. Requires consultation with the U.S. Fish and Wildlife Service and the state to develop measures to prevent, mitigate, or compensate for project-related losses to fish and wildlife.	Relevant federal and state agencies will be contacted to help analyze the effects of remedial actions on wildlife in wetlands and river.
Surface Water, Air, Wetlands	STATE-Maine Site Location Regulations-No Adverse Environmental Effect Standard of the Site Location Law (38 MRSA §§ 481 et seq. and regulations at c. 375)	These regulations prohibit any development from affecting the existing uses, scenic character, or existing natural resources in or near a community. Of particular concern are adverse impacts on air quality, drainage ways and infiltration relationships, erosion and sedimentation controls, and surface water. The regulations also prohibit excessive noise from developments.	Although a permit is not required, the response action will comply with the substantive requirements of these regulations.
Surface	STATE-Maine Natural Resources Protection	This act prescribes standards for specific activities that may take place in or adjacent to water bodies to prevent the degradation or	Although a permit is not required, the substantive

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Table 7: Location-Specific ARARs
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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
Water, Wetlands	Act (38 MSRA §§ 480-A thru 480-D and regulations at c. 305, 310)	destruction of these areas. These activities must not interfere with existing scenic, aesthetic, recreational, or navigational uses in these areas.	aspects of these requirements will be met. Response action will be implemented in a manner that would not interfere with the existing scenic, aesthetic, recreational, or navigational uses of the area.
All	STATE-Maine Site Location Development Law and Regulations (38 MRSA Sections 481-490; CMR Chapter 375)	This act and these regulations govern development and include hazardous activities that consume, generate, or handle hazardous wastes and oil. Activities cannot adversely affect existing uses, scenic character, or natural resources in the municipality or neighbouring municipality. The regulations provide that there shall be no unreasonable adverse effects on specified items (including air quality, runoff/infiltration relationships and surface-water quality), no unreasonable alteration of climate or natural drainageways, and provision for erosion and sedimentation control and noise control.	Response actions will comply with these requirements, if deemed appropriate.
All	STATE-Maine Inland Fisheries and Wildlife Laws and Regulations (12 MRSA Chapter 713, Section 7751)	The state of Maine has authority to research, list, and protect any species deemed endangered or threatened, as listed in the state regulations. The Maine Department of Inland Fisheries and Wildlife also has developed the following administrative categories for species not considered endangered or threatened but considered important for research and further evaluation: Maine Watch List, Special Concern List, and Indeterminate Category. The department determines appropriate use(s) of various habitats on a case-by-case basis. The Maine lists may differ from the federal lists of endangered species.	While no endangered or threatened species have been identified on site, these lists will be reviewed to assess whether Maine-listed species may be present. During the remedial action, measures would be implemented to protect these species, if encountered.
Wetlands	STATE-Maine Wetlands Protection (CMR Chapter 310, Section 1)	These regulations outline requirements for certain activities adjacent to any freshwater wetland greater than 10 acres or with an associated stream, brook, or pond. The activities must not unreasonably interfere with certain natural features, such as natural flow or quality of any waters, nor harm significant aquatic habitat, freshwater fisheries, or other aquatic life.	Response actions would meet activity standards. Substantive requirements of these regulations must be met for actions taken within 100 feet of a wetland or stream.
All	STATE-Endangered Species Act (16 USC 1531 et seq.; 40 CFR 6.302(h))	This statute requires that federal agencies avoid activities that jeopardize threatened or endangered species or adversely modify habitats essential to their survival. Mitigation measures should be considered if a listed species or habitat may be jeopardized.	Although no endangered or threatened species were identified on site, their presence has been noted in the area. Removal alternatives would ensure that listed species or habitats would not be adversely affected.

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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
Groundwater	FEDERAL-SDWA-Maximum Contaminant Levels (MCLs) (40 CFR 141.11-141.16)	MCLs have been promulgated for a number of common organic and inorganic contaminants. These levels regulate contaminants in public drinking water supplies and are also considered relevant and appropriate for groundwater aquifers potentially used for drinking water.	MCL for TCE will be used as a baseline measure to evaluate the performance of the response action.
Groundwater	FEDERAL-SDWA-Maximum Contaminant Level Goals (MCLGs) (40 CFR 141.50-141.51)	MCLGs are health goals for public water systems. MCLGs are set at levels that will result in no known or anticipated adverse health effects with an adequate margin of safety. Non-zero MCLGs are to be used when MCLs have not been established.	MCLGs for TCE and TCA will be used as a baseline measure to evaluate the performance of the response action.
Groundwater	FEDERAL-RCRA-Groundwater Monitoring (40 CFR §§ 265.90-265.94)	These regulations establish groundwater monitoring requirements for surface impoundments, landfills, or land treatment facilities used to manage hazardous waste.	The response action will comply with these requirements.
Surface Water	FEDERAL-CWA-The National Pollutant Discharge Elimination System (40 CFR Part 122 and 125)	This EPA administered permit program imposes limitations on the discharge of pollutants from a point source into the waters of the United States.	All NPDES substantive requirements will be followed for potential discharges to the Royal River.
Surface Water	STATE-Maine Regulations Relating to Water Quality Criteria for Toxic Pollutants (c. 584)	These regulations establish surface water quality criteria. In particular, ambient levels of toxic pollutants cannot exceed federal water quality criteria.	Any potential discharge to surface water must comply with these regulations.
Hazardous Waste	FEDERAL-RCRA-Standards Applicable to Generators of Hazardous Waste (40 CFR Part 262, Subpart A)	Requirements establish standards for storage, labeling, accumulation times, and disposal of hazardous waste.	Hazardous waste generated during response actions will be handled and disposed in accordance with these standards.
Hazardous Waste	STATE - Maine Hazardous Waste Management Rules, 06-096 CMR c.85 - 857	These rules govern management of hazardous waste.	Hazardous waste generated during response actions will be handled and disposed in accordance with these rules.
Solid Waste	STATE - Maine Solid Waste Management Rules, 06-096 CMR c.400.1	Establishes rules for handling non-hazardous waste.	Non-hazardous waste generated during response actions will be handled in accordance with these rules.
Air	FEDERAL-RCRA-Air Emission Standards for Process Vents (40 CFR Part 264, Subpart AA)	Contains air emission standards for process vents associated with various treatment processes including air stripping. Standards apply to facilities that manage hazardous wastes with organic concentrations of at least 10 ppmw.	Air stripping operations will be conducted to meet these standards. Applicable, if organic concentrations in waste are equal to or greater than 10 ppmw.

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MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE FS
		apply to facilities that manage hazardous wastes with organic concentrations of at least 10 ppmw.	organic concentrations in waste are equal to or greater than 10 ppmw.
Air	FEDERAL-RCRA-Air Emission Standards for Equipment Leaks (40 CFR Part 264, Subpart BB)	Contains air emission standards for equipment leaks at hazardous waste treatment, storage, and disposal facilities. Includes design specifications and monitoring requirements. Applies to equipment contacting wastes with at least 10% organics by weight.	Hazardous waste treatment facility will be constructed, maintained and monitored as required. Applicable, if organic concentrations in waste are equal to or greater than 10% by weight.
Air	FEDERAL-RCRA-Air Emission Standards for Tanks, Surface Impoundments, and Containers (40 CFR Part 264, Subpart CC)	Contains air emission standards for treatment, storage, and disposal facilities using tanks, surface impoundments, and containers to manage hazardous wastes containing at least 100 ppmw VOCs.	Emissions from excavated soils and sediments will be monitored and controlled prior to off-site disposal. Applicable, if at least 100 ppmw VOCs are contained/impounded.
Air	FEDERAL-EPA Policy on Control of Air Emissions from Superfund Air Strippers at Superfund Groundwater Sites (OSWER Directive 9355.0-28)	Provides guidance on the controlling air emissions from air strippers used for groundwater treatment at Superfund sites.	Emissions from air strippers will be monitored and controlled in accordance with this policy.
Air	STATE-Maine Air Pollution Control Laws-Maine Emissions License Regulations (38 MSRA §§ 585, 590 and regulations at c. 115)	Requires new sources of air emissions to demonstrate that its emissions do not violate ambient air quality standards. New sources must meet preconstruction monitoring and post-construction monitoring requirements.	Although a license is not required under CERCLA, the substantive requirements of this regulation will be met for off-gas treatment.